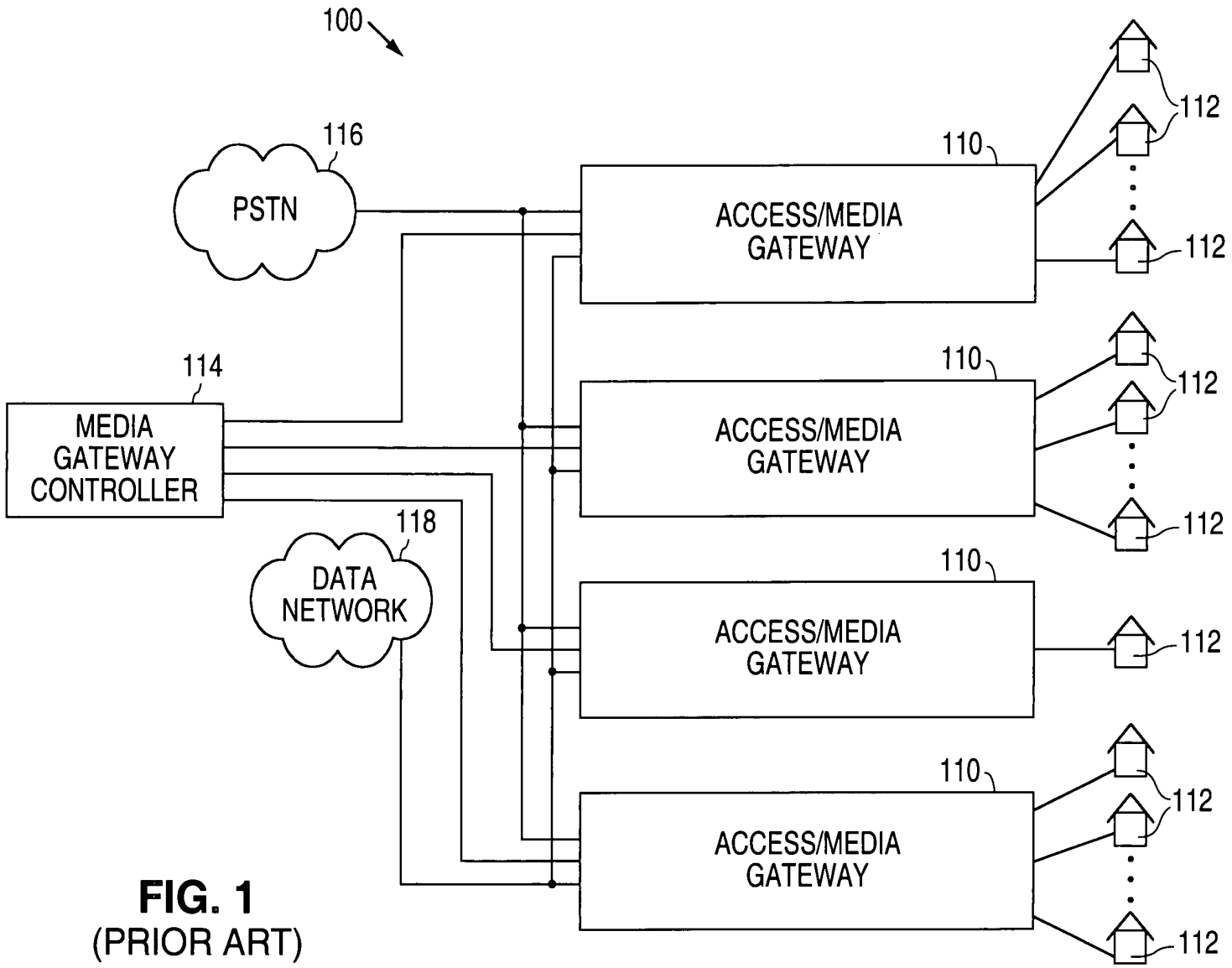


FIG. 1
(PRIOR ART)

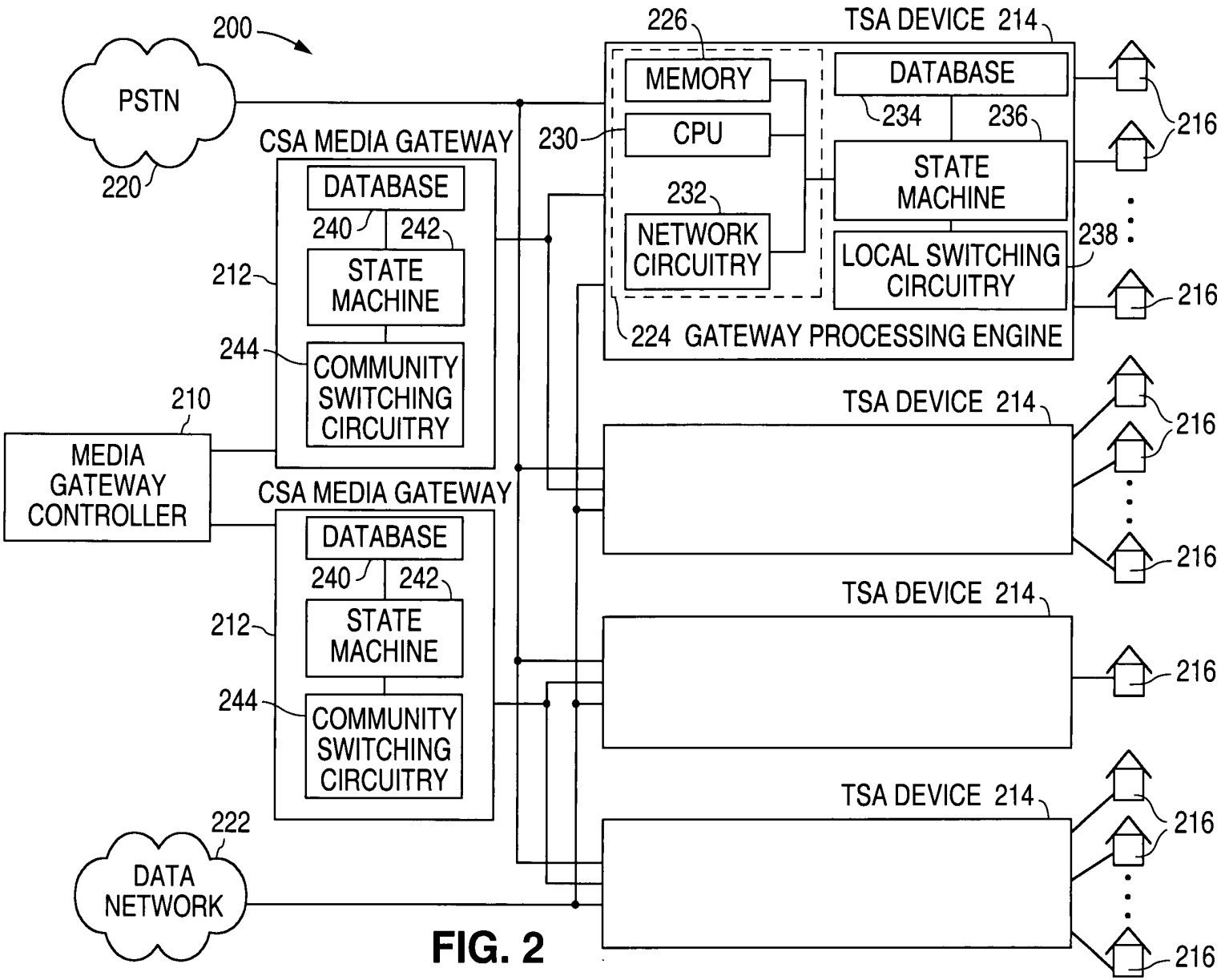

200
PSTN
220
CSA MEDIA GATEWAY
DATABASE
240
242
STATE MACHINE
212
244
COMMUNITY SWITCHING CIRCUITRY
210
MEDIA GATEWAY CONTROLLER
CSA MEDIA GATEWAY
DATABASE
240
242
STATE MACHINE
212
244
COMMUNITY SWITCHING CIRCUITRY
222
DATA NETWORK
226
TSA DEVICE 214
MEMORY
CPU
230
232
NETWORK CIRCUITRY
DATABASE
234
236
STATE MACHINE
238
LOCAL SWITCHING CIRCUITRY
224 GATEWAY PROCESSING ENGINE
216
TSA DEVICE 214
216
216
TSA DEVICE 214
216
TSA DEVICE 214
216
216

FIG. 2

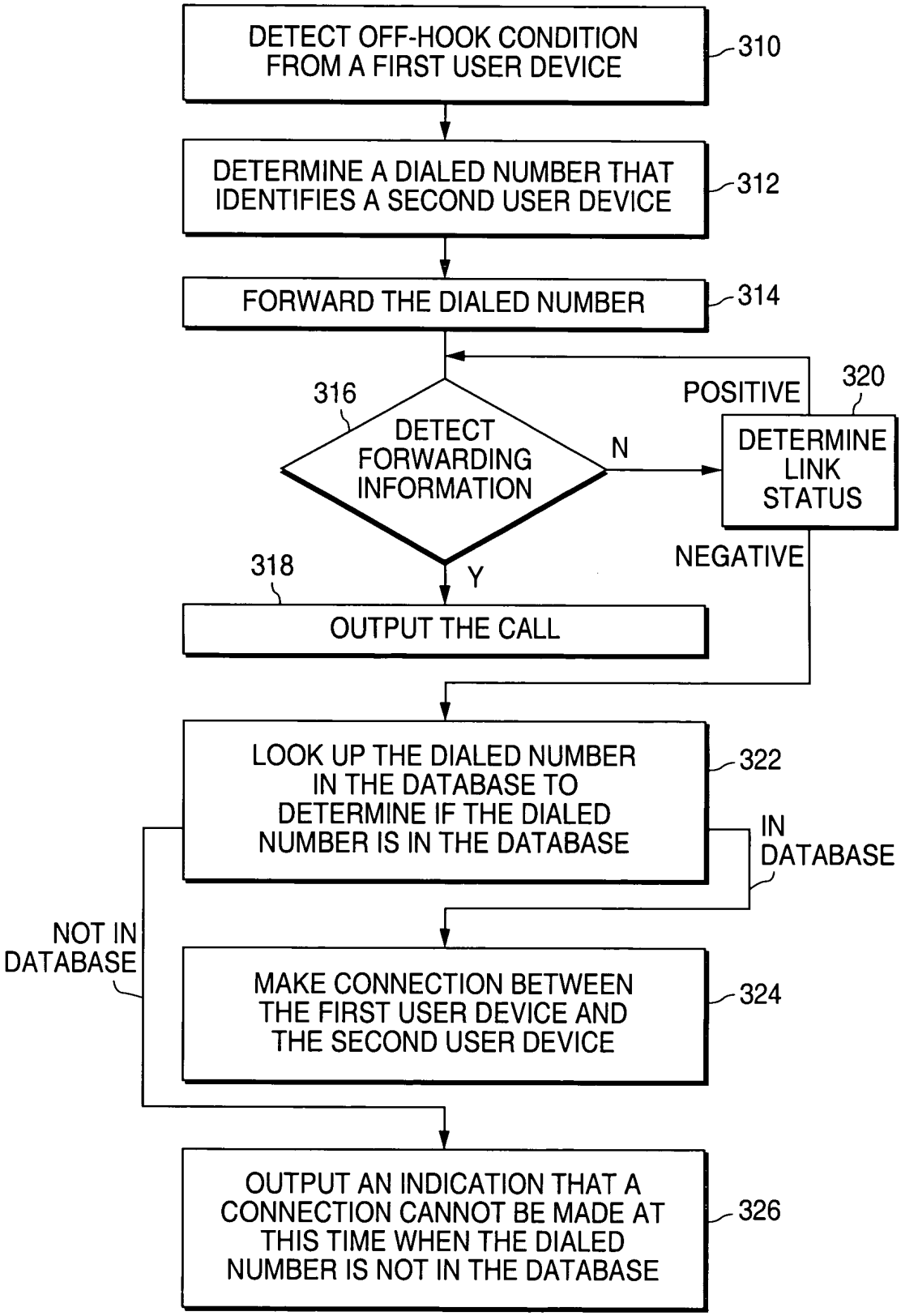

DETECT OFF-HOOK CONDITION FROM A FIRST USER DEVICE
310
DETERMINE A DIALED NUMBER THAT IDENTIFIES A SECOND USER DEVICE
312
FORWARD THE DIALED NUMBER
314
316
DETECT FORWARDING INFORMATION
N
POSITIVE
320
DETERMINE LINK STATUS
NEGATIVE
Y
318
OUTPUT THE CALL
LOOK UP THE DIALED NUMBER IN THE DATABASE TO DETERMINE IF THE DIALED NUMBER IS IN THE DATABASE
322
IN DATABASE
NOT IN DATABASE
MAKE CONNECTION BETWEEN THE FIRST USER DEVICE AND THE SECOND USER DEVICE
324
OUTPUT AN INDICATION THAT A CONNECTION CANNOT BE MADE AT THIS TIME WHEN THE DIALED NUMBER IS NOT IN THE DATABASE
326

FIG. 3

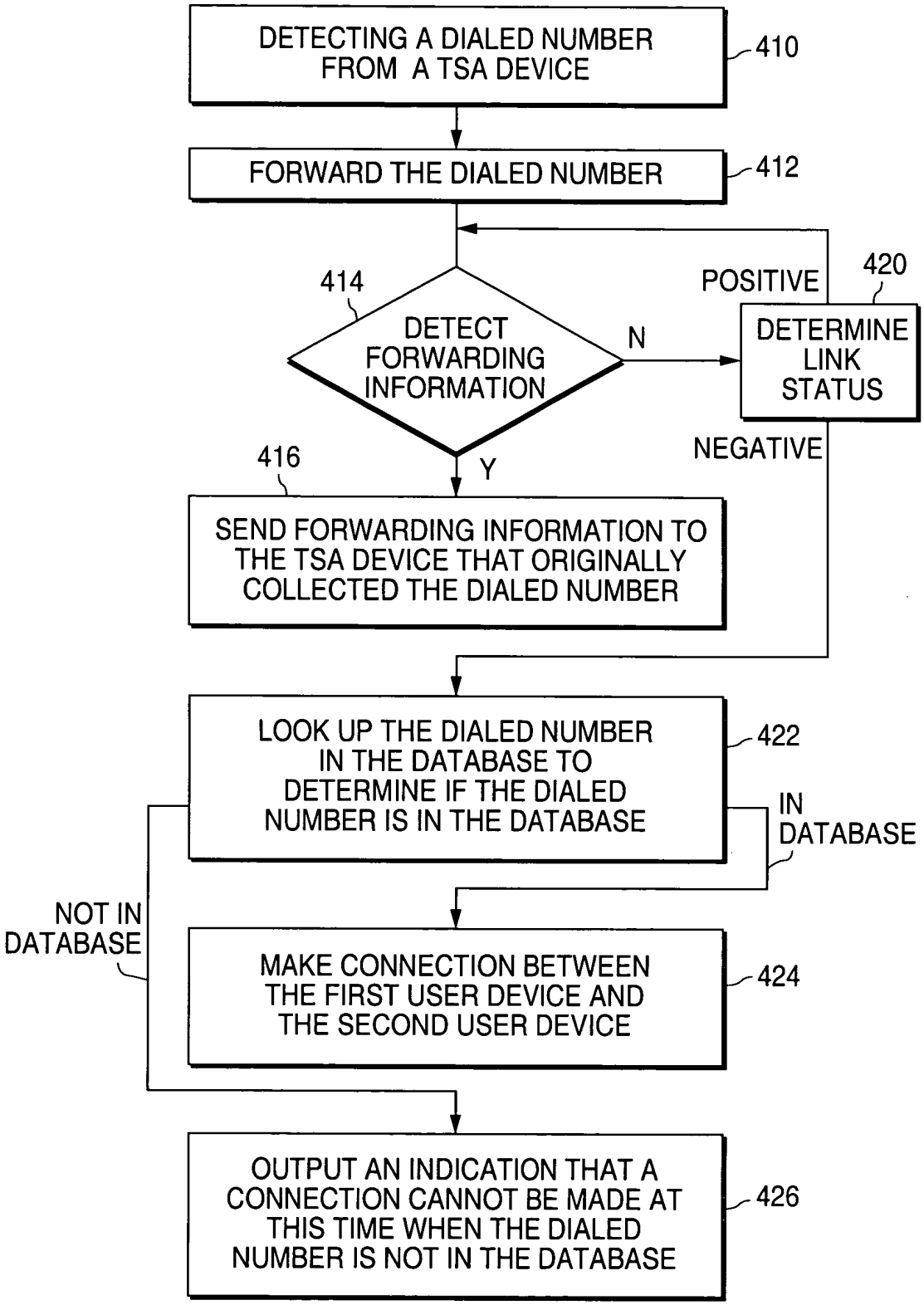

DETECTING A DIALED NUMBER FROM A TSA DEVICE
410
FORWARD THE DIALED NUMBER
412
414
DETECT FORWARDING INFORMATION
N
POSITIVE
420
DETERMINE LINK STATUS
NEGATIVE
416
Y
SEND FORWARDING INFORMATION TO THE TSA DEVICE THAT ORIGINALLY COLLECTED THE DIALED NUMBER
LOOK UP THE DIALED NUMBER IN THE DATABASE TO DETERMINE IF THE DIALED NUMBER IS IN THE DATABASE
422
IN DATABASE
NOT IN DATABASE
MAKE CONNECTION BETWEEN THE FIRST USER DEVICE AND THE SECOND USER DEVICE
424
OUTPUT AN INDICATION THAT A CONNECTION CANNOT BE MADE AT THIS TIME WHEN THE DIALED NUMBER IS NOT IN THE DATABASE
426

FIG. 4

FIG. 5

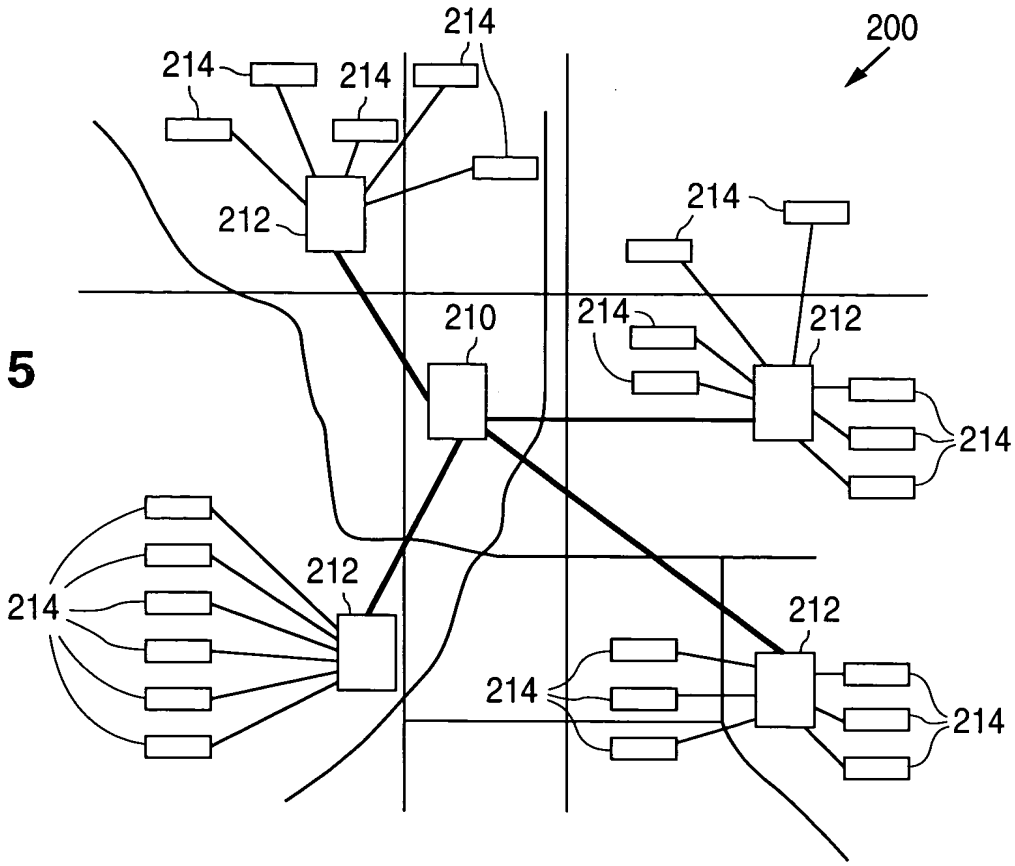
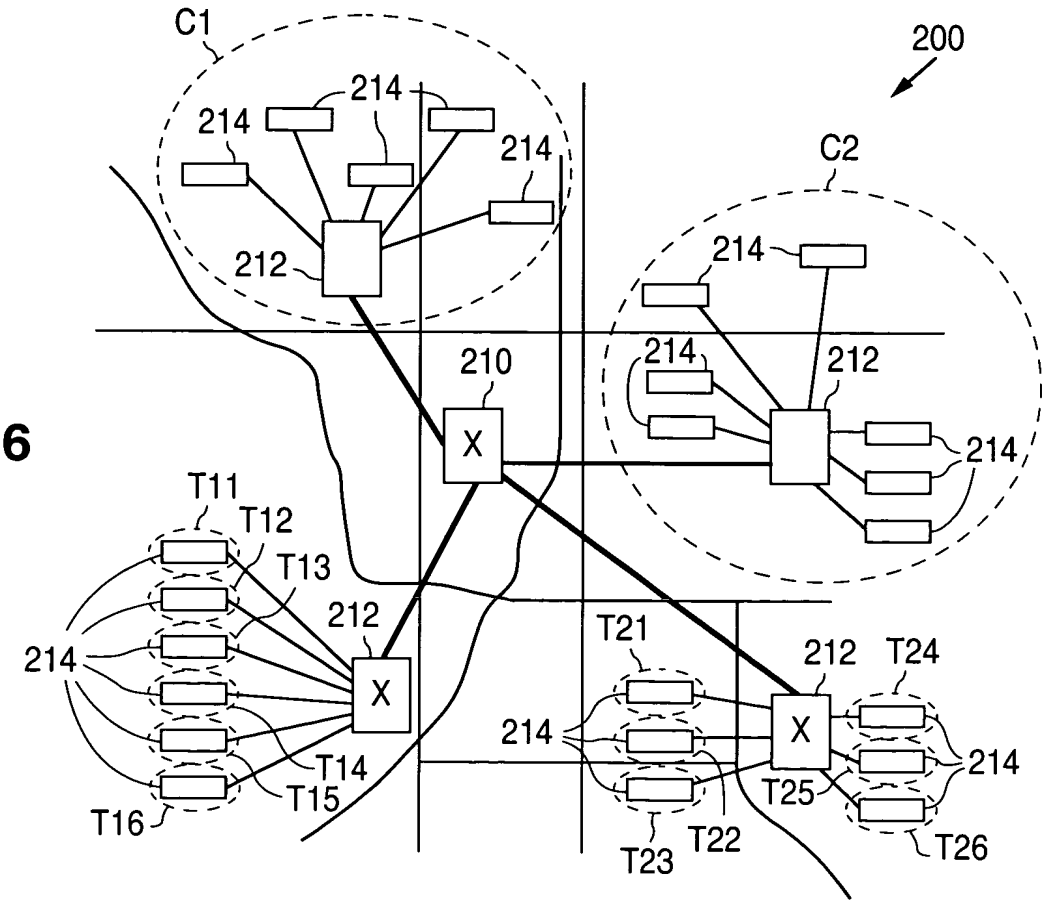

200
214
214
214
212
214
210
214
212
214
212
214
212
214
214

FIG. 6


C1
200
214
214
214
214
C2
212
214
210
214
212
X
214
T11
T12
T13
212
214
T21
212
T24
X
214
214
T14
T15
T25
T16
T23
T22
T26

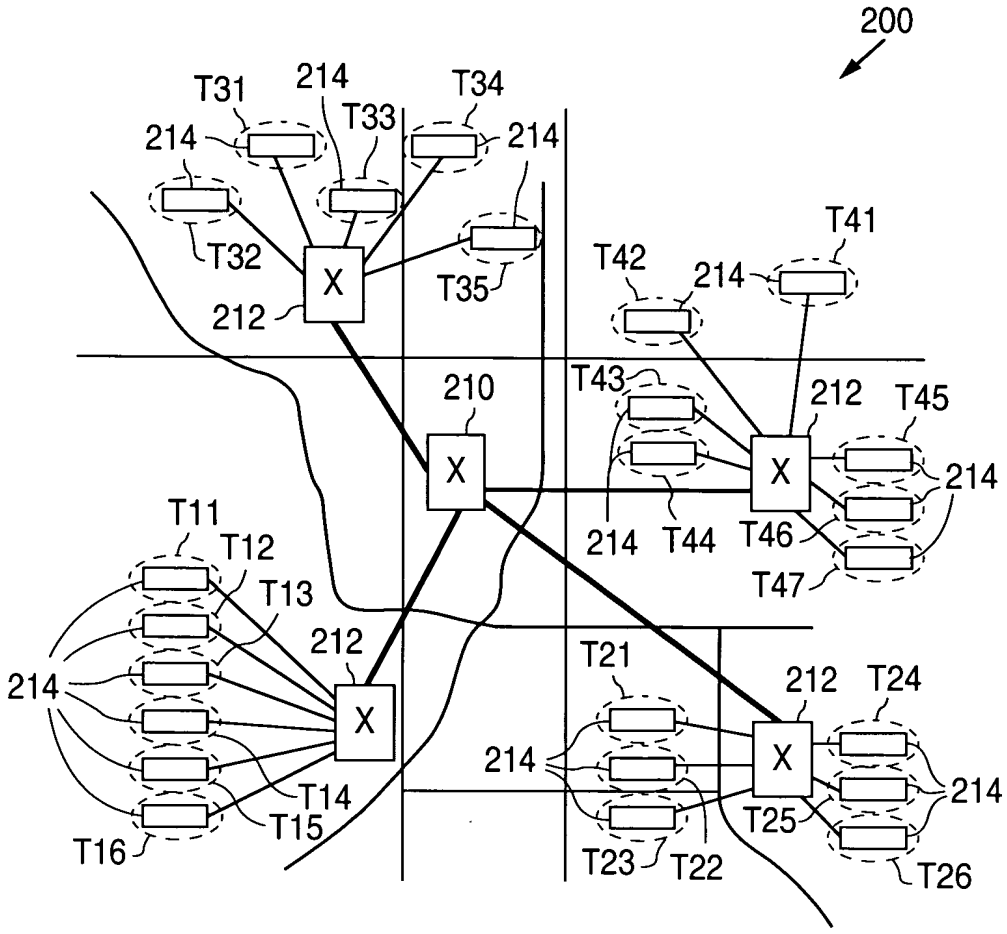

200
T31
214
T33
T34
214
214
T32
X
T35
212
T41
T42
214
210
T43
212
T45
X
X
214
214
T44
T46
T47
T11
T12
T13
212
214
X
T14
T15
T16
T21
212
T24
214
X
214
T25
T23
T22
T26

FIG. 7